

Allergic Rhinitis and its Treatment

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Received 2nd Oct 2023,
Accepted 19th Oct 2023,
Online 23rd Nov 2023

Abstract: Allergic rhinitis is one of the increasing diseases in the population and is annoying to seasonal or permanent patients. Allergic rhinitis is a hypersensitivity reaction of the nasal mucosa and occurs as an inflammatory reaction. Currently, 10-40% of adults and 2-25% of children in the world suffer from this disease.

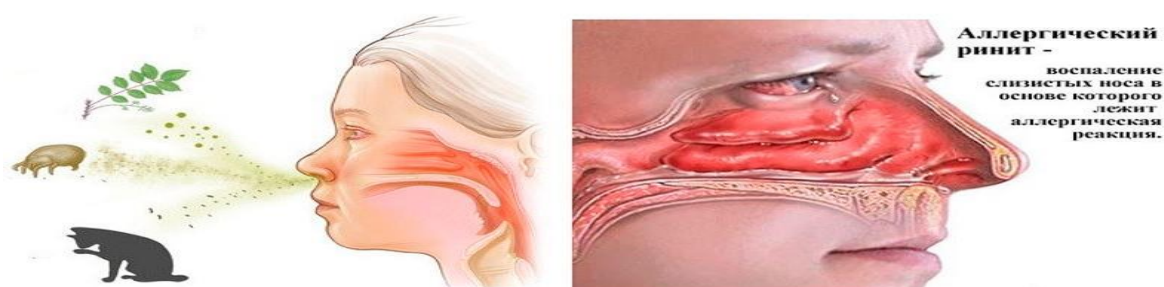
Key words: allergic rhinitis, allergen, histamine, immunoglobulin, pric sinamase, glucocorticosteroid, antihistamine.

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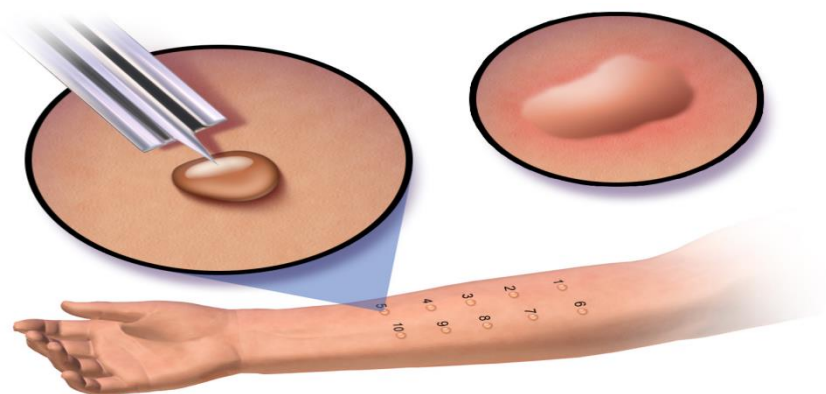
Allergic rhinitis is inflammation of the nasal mucosa. The origin of allergic rhinitis also depends on the genetic factor, with a predisposition from generation to generation. Also caused by external factors. These are allergens: pollen of flowers and plants, scraping of industrial construction raw materials, mold spores, animal and paranda hairs, chemical and natural products to be consumed (citrus fruits, dry fruits and vegetables), carcinva products, improper use of local drops used for the nose, an extremely strong response reaction of the immune system occurs due to damage to the upper respiratory tract by chronic viruses. As a result of the action of these allergens on the body, a large amount of histamine, leukotrienes are released in the body, which gives the characteristic of itching, having an affecting effect on the nerve endings of the mediators, nasal mucosa and upper respiratory tract, which leads to the appearance of edema, leading to hypersecretion and the onset of allergic rhinitis keladi. To many pre-formed and newly synthesized inflammatory mediators, such as histamine and peptide leukotrienes in response to the "antigen" reaction in qima, trigger sensitive nerve endings and vascular receptors of the nasal mucosa causing sneezing and rhinorrhea. cytokine influx occurs from mast cells such as H, TNF-a, il-3, il-4 interleukins.

Cytokines, in turn, facilitate the infiltration of eosinophils, T-lymphocytes and basophils into the nasal mucosa. Leukotrienes, which are secreted from infiltrating inflammatory cells, especially eosinophils, play a major role. But that's not all. An allergic reaction also leads to an increase in immunoglobulin E - IgE (antibodies) and agronulocytes, which in turn can cause inflammation with symptoms in various organs and systems (lungs, skin, eyes and nose). Characteristic symptoms of allergic rhinitis include persistent sneezing, runny nose, itchy nose and throat, and sometimes hyposmia (decreased sense of smell). In patients with allergic rhinitis, in 50-70% of cases, additional redness, itching and tears of the eyes can be observed due to the fact that allergic conjunctivitis (inflammation of the mucous membranes of the eyes) is observed. Externally, hyperpigmentation and edema are

observed in the patient's lower eyelids. Also, when patients have allergic rhinitis, they are observed to rub their nose a lot. Because, in this way, it is also achieved to reduce the itching in the nose. This condition is known in medicine as allergic salyut. Acute and chronic types of allergic rhinitis are distinguished. Typical symptoms of allergic rhinitis are increased nasal mucosal detachment, sneezing, nasal itching, tears, itchy eyes, runny nose, sleep disturbances, headache, rapid pharyngitis, weakness, difficulty breathing. In diagnosis, an allergic Anamnesis is collected, depending on the objective examination and immunological skin (prik)tests, depending on the titer of the blood taxilies (immunoglobulin IgE), with the help of additional rengen, camphor tomography, as well as the effectiveness of the drugs used are diagnosed. It is distinguished whether allergic rhinitis is seasonal or permanent. Seasonal allergic rhinitis-occurs in certain seasons (autumn and spring) as a result of a change in the amount of dust in the air.



Persistent allergic rhinitis-is constantly observed throughout the year, not depending on the seasons. In diagnosis, the total serum Ige content is determined using various radioimmune and immunoferment methods. At meior, IgE is 0-1 kEd/L in infants at birth and gradually increases until puberty, then decreases, and a specific amount of resolution is found in 20-30 years of age. The total amount of IgE greater than 100-150 kEd/L is considered elevated. Detection of special IgE is especially possible when it is not possible to obtain allergen extracts for skin fractures. For this purpose, radioallergosorbent testing (low) as well as radioimmune and immunoferment methods are initially used. Before, the wrist is wiped with 70% lisi of ethyl alcohol, a drop of Test control liquid at a distance of 2-3 cm to the skin, a 0.01% histamine solution and one drop of allergen extracts are selected patient kelip from the state of pretvidual is removed and applied. After that, a prick-Lancet is applied through a 1mm syringe on each drop of the skin, a new syringe is used for each puncture site. The reaction is assessed after 15-20 minutes. If a blister or hyperemia occurs at the injection site, the reaction is considered positive. The Allergen positive reaction is 3-7 mm ,with an exact 8-12 mm, Hyperallergic 13mm and above. Up to 16 allergens can be tested. If the Sinama does not produce results in 1 map, it will be re-tested after a certain period of time. It is not used in pregnant people, patients with bronchial asthma, patients with neurological disorders, acute infectious and respiratory diseases, when body temperature is high.



Examination of grease and washed water from the nasal mucosa allows for differential diagnosis between allergic and infectious rhinitis. For noallergic rhinitis, which is observed with an increase in allergic rhinitis and eosinophils, eosinophil infiltration is characteristic, and in bacterial infection, an increase in the number of neutrophils is characteristic. The amount of mediators and enzymes in the blood, nasal leaks or urine can be checked by titration of extremely special and sensitive methods – histamine, prostaglandin, leukotrienes C₄, I₄, E₄, tryptases, kinins, eosinophilic cation proteins. The initial amounts of these substances taken as a basis, as well as the amounts after exposure to the allergen, can be determined. Currently, this method is used only for research purposes. Allergic rhinitis should be distinguished from other diseases of the nasal passages (non-allergic rhinitis, sinusitis, nasal polyps, Adenoid hypertrophy). After diagnosing allergic rhinitis, a treatment is prescribed. Nasal drops and sprays (nasal preparations for allergic rhinitis). Antihistamine agents (citrine hydrochloride, desloratadi, fexophenadine, hydroxyzine. Corticosteroids(beclomethasone dipropionate, fluticasone-containing drugs (baconase, phlixonase, nasobec, Nasonex))) help to overcome symptoms. Antiallergic agents-sodium chromoglycate (chromogexal, chromoglin, chromosol) are mainly used in mild forms of allergic rhinitis. Topical vascular narrowing drugs (oxymetazoline (Nazivin), xylometazoline (Rhinoxyl,naphthysine,Snup,Rint), menthol and eucalypt oil - containing (eucalypt) drugs) - help reduce their symptoms (relieve edema).

Protection against allergens based on cellulose powder (nazaval) - the formation of a protective film on the mucous membrane of the nose, preventing contact with the allergen. Dietary yogurt is required so that allergic rhinitis does not re-irritate: paranda meat products, eggs, dry fruits: nuts,citrus fruits; fruits of red color are vegetables and cereals, cocoa and coffee products, carbonated drinks. Avoiding factors that lambish allergic rhinitis: wearing masks in dusty air, not keeping animals and poultry, keeping the house clean, updating the bed more often, avoiding allergic products are required.

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